

In the Drawings:

A replacement drawing sheet 1 is annexed to this paper. The replacement drawing sheet differs from the previous corresponding drawing sheet only in that Figure 1 is designated by a legend as "Prior Art".

REMARKS

This paper is in response to the Office Action mailed October 4, 2007, with reference to the above identified application.

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Claims 1 to 28 are pending in this application.

Claims 1, 3 to 8, 10, 12 to 17, 19, 21 to 26 and 28 stand rejected under 35 USC 103(a) as being unpatentable over Applicants Admitted Prior Art, hereinafter referred to as AAPA.

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The invention provides a method of detecting changes in a continuous stream of channel associated signalling, hereinafter referred to as CAS, data for a plurality of communications channels (claim 1). The invention also provides a computer software product enabled to cause a computer to execute such a method (claim 10), and a processor and memory arrangement for use in performing such a method (claim 19). A further aspect of the invention provides a communication network node comprising such a processor and memory arrangement (claim 28).

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The invention solves a problem associated with the AAPA. The AAPA relates to a method of detecting changes in a continuous stream of CAS data for a plurality of communications channels.

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In particular, according to the method of the AAPA, a block of data is written to a first ingress buffer and a next block of data is written to a second ingress buffer (see page 2, lines 30 and 31). This process continues in a continuous loop, with blocks of data being written to alternate buffers.

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According to the method of the AAPA, a processing core only begins the process of detecting changes in a block of data (as compared to a preceding block) after the block has been completely written to a buffer. This provides the processing core with 4ms in which to complete the detecting process for that entire block (see page 3, lines 7 to 9). That is to say, there is 4ms in which to detect changes in a block of data written to a buffer while a subsequent block is being written to the other buffer.

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The process of detecting changes in an entire block of data is computationally intensive and this prevents the processing core from performing other tasks.

Furthermore, because a next block of data is always being written to one of the two buffers, there is a need to maintain a copy of a previous block of data in a status array for comparison purposes (see page 3, lines 15 to 18). This copying process consumes additional computational resource.

The invention addresses the above described problems by breaking each block of data into "a plurality of rows" and performing the comparison process after "each" row of a block has been written.

Accordingly, all aspects of the invention are characterized by the step of writing a next block of data to an area of the circular memory buffer located sequentially after the area occupied by the previous block of data as a plurality of rows, each row comprising the predetermined number of timeslots of data, wherein after writing each row of said next block of data, changes in the data contained in the row are determined by comparing the row with the corresponding row in the previous block of data (emphasis added).

The above described distinction from the AAPA has been further emphasized by amending claims 1, 10, 19 and 28 to additionally recite that "the comparing of a first row is commenced before a last row has been written".

By performing comparison processes for each of a plurality of rows of a block instead of for the block as a whole, according to the invention, the comparison task may be split into a number of smaller tasks which may be scheduled at regular intervals to prevent other tasks from being blocked for long periods of time.

Furthermore, according to the invention, by commencing the comparison process for a first row before a last row has been written, the time available for performing the comparison process for the block is increased, thereby lowering the computational intensity of the comparison task.

The cited prior art does not provide any suggestion that a block of CAS data may be broken down into a plurality of rows, with a comparison process being performed on individual rows instead of the block as a whole, as provided for by the

invention. Applicant therefore respectfully submits that claims 1, 10, 19 and 28 are patentably distinguished from the cited prior art.

5 Detailed arguments are not presented in respect of the dependent claims, since the relevant rejections are no longer considered pertinent. Nevertheless, the arguments of the Examiner are not accepted.

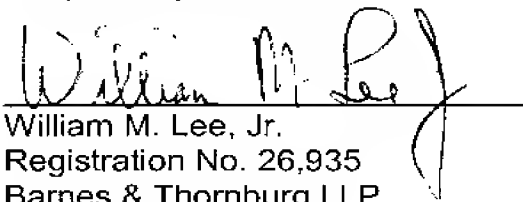
It is submitted that this application is now in condition for allowance. Such action is respectfully solicited.

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Respectfully submitted,

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